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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/676,677	09/30/2003	Naoki Satoh	16869G-087300US	8220

20350 7590 11/15/2005

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EXAMINER

HABERMEHL, JAMES LEE

ART UNIT	PAPER NUMBER
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2651

DATE MAILED: 11/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/676,677

Applicant(s)

SATOH ET AL.

Examiner

James L. Habermehl

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-4 and 7-10 is/are allowed.
- 6) ☒ Claim(s) 5 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 30 Sep 03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.
2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 5 is rejected under 35 U.S.C. 102(e) as being anticipated by Kamijima. Kamijima meets all the limitations of the claim, including a write head (43), a read head (42), a resistive heating element for controlling flying heights of said write and read heads (45), and a programmable voltage or current source (99, 100, 101) to allow for variations in power to account for variations in flying height due to variations in manufacturing (paras. 0007, 0008, 0009, 0011, and 0085).
4. Claims 1-4 and 7-10 are allowed. Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The following is a statement of reasons for the indication of allowable subject matter:

Claims 1, 3, and 7 are allowable over the prior art of record since the cited references taken individually or in combination fails to particularly disclose a suspension having a magnetic

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head assembly mounted thereon comprising a resistive heating element for controlling flying heights of said write and read heads, where the wires from the heating element shield the wires of the read head, as presented in the environment of claims 1, 3, and 7. It is noted that the closest prior art, Kamijima, shows a resistive heating element for controlling flying heights of said write and read heads. However, Kamijima fails to disclose the wires from the heating element shield the wires of the read head as claimed.

Claims 6 and 9 are allowable over the prior art of record since the cited references taken individually or in combination fails to particularly disclose a suspension having a magnetic head assembly mounted thereon comprising a resistive heating element for controlling flying heights of said write and read heads, where the waveform of a current or voltage to said resistive heating element has a time constant of 1 μ sec or more, as presented in the environment of claims 6 and 9. It is noted that the closest prior art, Kamijima, shows a resistive heating element for controlling flying heights of said write and read heads. However, Kamijima fails to disclose the waveform of a current or voltage to said resistive heating element has a time constant of 1 μ sec or more as claimed.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Xu et al. shows a resistive heating circuit similar to applicant's invention. Griesbach, Nakajima et al., Fukuda, Hamaguchi et al., Sluzewski et al., and Yoshizawa et al. show suspension arms with wire configurations similar to applicant's invention. Zhou shows a suspension with shielded read head wires similar to applicant's invention.

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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James L. Habermehl whose telephone number is (571)272-7556. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on (571)272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Habermehl/jlh
9 Nov 05



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SUPERVISORY PATENT EXAMINER
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